

**WHAT IS CLAIMED IS:**

1           1.       A bias-T apparatus comprising:

2               a housing comprising an input connector to be connected to a ground base transceiver station  
3           and an output connector to be connected to an antenna, said input connector and said output  
4           connector integrally formed at opposite sides of the housing, the housing having a housing hole and  
5           a fixing hole, the housing hole being formed longitudinally in the housing, the fixing hole connected  
6           perpendicularly to the housing hole;

7               a center conductor inserted in the housing hole and including a first conductor and a second  
8           conductor, which have a first connector pin and a second connector pin, respectively, the first  
9           connector pin and the second connector pin being respectively inserted inside of the output connector  
10          and the input connector, thereby enabling electric connection of a signal between the input connector  
11          and the output connector; and

12              a fixing pin having a first end connected perpendicularly to the center conductor and a second  
13          end inserted in the fixing hole, so that direct current power can be supplied from the second end to  
14          the output connector.

1           2.       The bias-T apparatus as claimed in claim 1, wherein the housing further has a recess  
2          for receiving elements of the bias-T apparatus, the recess being formed at an upper portion of the  
3          housing, which is located above and connected to the fixing hole.

1           3.     A center conductor of a bias-T apparatus, the bias-T apparatus having a housing  
2     which has a housing hole and includes an input connector and an output connector formed at  
3     opposite sides of the housing hole, the input connector being connected to a ground BTS, the output  
4     connector being connected to an antenna, the bias-T apparatus enabling electric connection of a  
5     signal between the input connector and the output connector and supplying direct current power to  
6     the output connector, the center conductor comprising:

7           a first conductor being inserted in the housing hole, extending in a longitudinal direction of  
8     the housing hole, and having a reception tube; and

9           a second conductor being inserted in the housing hole, extending in a longitudinal direction  
10    of the housing hole, and having a conductor shaft, the conductor shaft being inserted in the reception  
11    tube so that the first conductor and the second conductor are assembled with each other in the  
12    housing hole, wherein

13          at least one of an inner surface of the reception tube and an outer surface of the conductor  
14    shaft is anodized.

1           4.     A bias-T apparatus comprising:

2           a housing including an input connector and an output connector integrally formed at opposite  
3     sides of the housing, the input connector being connected to a ground BTS, the output connector  
4     being connected to an antenna, the housing having a housing hole and a fixing hole, the housing hole  
5     being formed longitudinally in the housing, the fixing hole being formed through an upper portion  
6     of the housing and connected perpendicularly to the housing hole;

7           a center conductor including a first conductor and a second conductor which extend  
8           longitudinally and are assembled with each other in the housing hole, the first conductor including  
9           a first connector pin and a reception tube formed at opposite ends of the first conductor, the second  
10          conductor including a second connector pin and a conductor shaft formed at opposite ends of the  
11          second conductor, the conductor shaft being inserted in the reception tube, at least one of an inner  
12          surface of the reception tube and an outer surface of the conductor shaft being anodized, the first  
13          connector pin and the second connector pin being respectively inserted inside of the output connector  
14          and the input connector, thereby enabling electric connection of a signal between the input connector  
15          and the output connector; and

16          a fixing pin having a first end connected perpendicularly to the center conductor and a second  
17          end inserted in the fixing hole, so that direct current power can be supplied from the second end to  
18          the output connector.

1           5.       The bias-T apparatus as claimed in claim 4, wherein the housing further has a recess  
2           for receiving elements of the bias-T apparatus, the recess being formed at an upper portion of the  
3           housing, which is located above and connected to the fixing hole.

1           6.       The bias-T apparatus as claimed in claim 4 or 5, wherein the first connector pin and  
2           the reception tube of the first conductor are separately formed and can be assembled with each other.